BRITISH COLUMBIA POLICE COMMISSION

OLEORISIN CAPSICUM ("CAP-STUN") SPRAY
EVALUATION
APRIL 22, 1991 - OCTOBER 22, 1991

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TO: Mr. David Edgar, Chairman
and Members of the
British Columbia Police Commission

FROM: Inspector P. Jamieson, Committee Chairman;
The Committee on the Use of Less Than Lethal Force by
Police Officers in British Columbia
Sgt. P. Battershill, Vancouver Police Department
Mr. R. Hull, Deputy Director, Police Academy

DATE: 91 November 15

SUBJECT: **Report of the Committee on the Use of Less Than Lethal Force by Police Officers in British Columbia: Use of Oleoresin Capsicum Spray to Incapacitate Suspects**

BACKGROUND

In July of 1990 the committee presented a report to the B.C. Police Commission titled: "Recommendations of the Committee on the Use of Less Than Lethal Force by Police Officers in British Columbia". A key recommendation in the report proposed that an operational testing be conducted relative to the use of capsicum spray to incapacitate suspects dealt with by the police.

This recommendation was approved and it was decided that an operational testing would be held from 91 April 22 to 91 October 22.

Seven British Columbia Municipal Police Departments were selected to participate in the test, and on 91 April 18, 37 serving police officers were provided with training and were each issued with one spray cannister of capsicum. The training was conducted at the Justice Institute of British Columbia Police Academy using private instructors from the United States.

A survey form was also provided to the 37 participants asking that they document and submit a report for each operational use of the spray.

RESULTS

The 37 officers involved in the test submitted the following numbers of reports:

Police Department	Cannisters	Number of Usages (Reports)
Vancouver	15	32
Victoria	5	34
Port Moody	2	2
Esquimalt	2	2
Matsqui	3	5
Delta	5	13
Saanich	5	16
Total	**37**	**104**

Complete reports regarding each usage are on file at the B.C. Police Commission offices. The following important points are of note relative to the reports:

1. Officers used the spray in a wide variety of circumstances which included arrest situations, domestic disputes, cellblock violence incidents, fights, out of control parties and incidents where suspects had possession of weapons;

2. In over 93% of the cases the spray was totally effective for use to incapacitate a suspect. Officers submitting the reports oftentimes included glowing comments regarding the spray;

3. There were no injuries to suspects or officers arising from use of the spray;

4. Contamination was listed as "slight" or of no significance in the vast majority of cases; and

5. The spray appears to work effectively on dogs (2 out of the 104 applications).

The following precautions should be applied to the test results:

1. The study was intended as a practical, operational test of the spray. The committee did not attempt to apply scientific or statistical methodology to the study.

2. The roughly 7% "failure" rate of the spray appears to relate to a combination of the following:

   - failure of the spray to hit the suspect;

   - too close to suspect for spray to work properly;

   - quality control problem with one cannister which was utilized; or

   - rare occasions where a suspect may have been able to resist the effect of the spray.

(In examining the "failure rate", it would appear that the spray is able to incapacitate suspects in excess of 95% if applied properly. A lengthy scientific study would be needed to establish this definitively.)

It is not an understatement to rate the test results as **"extremely successful."**

PRODUCT TESTED

The product utilized for test purposes was as follows:

"Cap-Stun" spray;
Standard Duty Size Cannister
5% Oleoresin Capsicum
Isopropanol Carrier Agent
(Cap-Stun is a registered trademark of Zarc International)

The committee cannot endorse " Cap-Stun " or any other Oleoresin Capsicum product presently on the market. This product was selected simply because it was the most safely tested and readily available product on the market at the time. The cannisters utilized are now in fact obsolete and have been replaced by ones which have a trigger mechanism, 5.5% Oleoresin Capsicum solutions and increased effective range.

Further comments are made regarding commercial products later in this report.

RECOMMENDATIONS

It is recommended that the B.C. Police Commission contact the Municipal Police Departments in British Columbia and make them aware that this testing has produced extremely favourable results.

It is further suggested that the B.C. Police Commission recommend that Municipal Police Departments consider an expedient adoption of Oleoresin Capsicum spray as an incapacitating spray for use by line police officers in British Columbia. We are of the view that this spray is a significant breakthrough relative to police use of less than lethal force in this Province.

PRECAUTIONARY RECOMMENDATIONS

The committee is obligated to point out the following precautions relative to the recommendations contained in this report:

1. Officers issued with the spray must be properly trained in the use of the spray;

2. Officers issued with the spray must be provided with training in relation to a "Use of Force" model such that they are aware of when it is appropriate to use the spray. In this area the B.C. Police Commission should direct the Police Academy to prepare training which would be suitable for recruit and in-service officers;

3. Police departments should prepare policy relating to use of the spray by their officers;

4. Police departments should consider having mandatory reporting when an officer utilizes the spray; and

5. There are alot of products coming onto the market which use Oleoresin Capsicum as an incapacitating agent. There will be differences in these products which can be extremely important.

These differences include:

- whether the Oleoresin Capsicum is in a particulate or solute form;
- whether the carrier involved is hazardous (there are a variety of carriers on the market, some of which are hazardous to humans);
- whether there is proper quality control relative to the product sold;
- whether there is a defined shelf life affecting the product involved;
- whether there has been medical/safety testing of the product prior to marketing;
- whether or not the manufacturer provides training in relation to the product use; and
- whether the design characteristics of the product are appropriate (belt holster clips, trigger mechanisms, cannister size, etc.).

These issues are very technical and can be subject to skewed assessments by the persons selling the product. It is recommended that the Deputy Director of the Police Academy maintain an ongoing expertise in this area and that he be available for consultation with the Municipal Police Departments.

It is recommended that the Police Academy bulk purchase this product in a manner similar to that utilized for purchase of operational revolver ammunition. It is suggested that the B.C. Police Commission approach the B.C. Association of Chiefs of Police and Police Academy to determine whether there is support for this approach.

EMERGENCY RESPONSE GRENADES

The Vancouver Emergency Response Team was provided with 10 Cap-Stun grenades as part of the 6 month test period. No occasions arose where the grenades were utilized. These cannisters will remain with Vancouver E.R.T. and any use will be reported to the B.C. Police Commission for the purpose of evaluation.

CONCLUSION

The test has been very successful. This spray holds great promise in the area of police use of less than lethal force. It is foreseeable that this spray will prevent injury or loss of life in the future.

J.P. Jamieson,
Executive Officer

c.c.: Mr. R. Hull (Committee)
Sgt. P. Battershill (Committee)

BRITISH COLUMBIA POLICE COMMISSION

INFORMATION STATEMENT

The British Columbia Police Commission has announced its findings and recommendations to municipal police in relation to Oleoresin Capsicum Spray.

The formal testing of this spray was recommended in an earlier report to the Commission on The Use of Less Than Lethal Force.

The spray used in a six month evaluation by seven B.C. police departments is known as "Cap-Stun". The spray is made from a derivative of pepper and is delivered by an alcohol based propellant.

The spray has previously been extensively tested in the United States. The Commission's testing represents the first detailed consideration of the product in Canada.

The Commission evaluation results indicate:

1. Officers used the spray in a wide variety of circumstances which included arrest situations, domestic disputes, cellblock violence incidents, fights, out of control parties and incidents where suspects has possession of weapons;

2. In over 93% of the cases the spray was totally effective for use to incapacitate a suspect. Officers submitting the reports often times included glowing comments regarding the spray;

3. There were no injuries to suspects or officers arising from use of the spray;

4. Contamination was listed as "slight" or of no significance in the vast majority of cases; and

5. The spray appears to work effectively on dogs (2 out of the 104 applications).

The Commission has concluded that this spray will be a significant aid to police in arresting violent offenders and will lessen the chance of serious injury to subjects and to police themselves. It feels the spray is an important tool that should be more widely used in police and law enforcement agencies in British Columbia.

Commission recommendations:

1. The Commission recommends that this spray be seriously considered by each of the municipal police forces in British Columbia for incorporation, after appropriate training, into the force options of those departments; and

2. That the Police Academy of the Justice Institute of British Columbia prepare an appropriate training program for municipal departments who wish to equip their officers with this spray.

December 16, 1991

Contact: J. David Edgar
Chairman
387-0020